



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
LANSING



LIESL EICHLER CLARK  
DIRECTOR

## STANDARD PERMIT FOR PESTICIDE APPLICATION TO SURFACE WATERS OF THE STATE OF MICHIGAN

Permits are required by Part 31, Water Resources Protection; and Part 33, Aquatic Nuisance Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Permission is hereby granted, based on information supplied on the permit application and on the applicant's assurance of adherence to State of Michigan requirements and this permit, to apply chemicals to the waters described herein for the control of aquatic plants and/or algae.

Permit Number: [ANC9807131](#)

Date Effective: [March 3, 2022](#)

This permit is valid only through [December 31, 2025](#).

### Permittee Name and Address

[PLM Lake & Land Management Corp.](#)  
[PO Box 132](#)  
[Caledonia, MI, MI 49316](#)

### Name of Waterbody(ies) Affected

[WB-1352-3: Bear Lake: Professional Lake Management](#)

### County(ies) in Which Waters are Located

[Muskegon](#)

### **Authority granted by this permit is subject to the following conditions and limitations:**

All submissions and notifications to the Department of Environment, Great Lakes, and Energy (EGLE), as required by this permit shall be accomplished through the MiWaters permitting database. For additional information or questions regarding this permit, please contact EGLE's Aquatic Nuisance Control (ANC) Program at EGLE, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958; by telephone at 517-284-5593; by e-mail at [EGLE-WRD-ANC@Michigan.gov](mailto:EGLE-WRD-ANC@Michigan.gov); or visit the website at: [Michigan.gov/ANC](http://Michigan.gov/ANC).

Original Signed by: [Eric Bacon](#)  
Aquatic Nuisance Control Program  
Water Resources Division

## Section A. Annual Fee for Permits that Cover More than One Year

In accordance with Section 3309 of Part 33, the permittee shall submit payment of an annual fee to EGLE by April 1 or prior to the first treatment for each year covered by a multi-year permit. The annual fee is equal to the initial permit application fee plus any additional fee(s) resulting from a permit revision or expansion that increases the approved treatment area to a higher fee category. The annual fee shall be submitted through the “ANC Annual Fee” Schedule of Compliance in the MiWaters permitting database.

Initial Permit Application Fee: [\\$1600](#)

## Section B. Authorizations and Coverage Provisions

### 1. Chemical Application

The permittee may apply only those specific chemical products that are approved by EGLE for use under Standard Permits in the areas identified by this permit and delineated on the attached approved treatment map(s). Please consult the chemical table titled “Chemicals Approved for Use Under the Aquatic Nuisance Control Standard Permits.” This table is updated as any new chemicals are approved. The table is available by using this link [Michigan.gov/ANC](http://Michigan.gov/ANC) and following these instructions: under the topic “General Information,” select “Chemicals used for Treatment of Aquatic Nuisance Plants and/or Algae,” and then select “Chemicals Approved on Standard Permits.”

The application of chemical pesticides to the areas identified on the approved treatment map(s) is restricted to the stated maximum application rates listed in the table. This rate may be lower than the maximum allowed under the federal product label. The maximum total amount of each chemical applied to the treatment site shall be based upon the application rates in the table, the actual area of treatment, the average depth of the treatment area, the treatment timing and location, plant or algae density, the target chemical concentration in the water, and the target species, or as otherwise indicated by the product label.

Some chemical products may require special applicator certifications. Refer to the federal product label for applicator certification requirements.

### 2. Treatment Intervals

With few exceptions, the products approved for use in Section B.1. of this permit have a minimum length of time required between each treatment in the same area(s) of impact, in accordance with the federal product label. Some of the federal product labels also have limits on the total amount of chemical applied annually per treatment area. Follow the federal label treatment interval and annual limits unless a more restrictive interval or use limitation is specified in Section B.4. or the cover page of this permit.

### 3. Authorized Areas

In accordance with Sections 3308 and 3311 of Part 33, the control of nuisance aquatic plants or algae is authorized only in areas as defined by this permit and as delineated on the attached approved treatment map(s), or through an expansion due to an infestation of an adjacent area.

Areas where chemical control of nuisance plants or algae is undertaken must either be under the legal control of the permittee or the party(ies) who has/have granted the permittee written permission to do the treatment, or otherwise under legal control as specified in Section 3308 of Part 33.

### 4. Special Conditions

Follow all federal product label instructions to protect human health and the environment. The label is provided with the pesticide container and includes requirements for the safe and effective use of the pesticide; and may suggest ways to avoid unintended impacts to human health and the environment. Pesticide labels are federally approved legal documents and their requirements are enforced under both federal and state laws. This permit incorporates the product labels in effect at the time of application by reference.

All chemicals shall be applied in a manner to minimize impacts to non-target plant and animal species. Refer to the federal product label requirements and suggestions to optimize selectivity. In addition, refer to the best management practices handbooks, and other best practices for Michigan by using this link [Michigan.gov/ANC](http://Michigan.gov/ANC) and following these instructions: under the topic "General Information" select "Best Management Practices."

Do not treat within the outlet setback indicated on the approved treatment map(s) attached to this permit, if applicable. An outlet setback is not required when there is no discharge from the waterbody.

Except for waterbodies with a total surface area of less than 10 acres and canals and marinas on the Great Lakes and connecting waters, copper treatments for algae, macroalgae, and submersed macrophytes are restricted to chelated copper products during May and June. No more than a cumulative total of 25 percent of the potential spawning area (the area of the waterbody within the 0-10 feet depth contours) may be treated with copper products during May and June. The 25 percent limit is a cumulative total of unique areas treated. Treatment of starry stonewort with chelated copper may exceed a cumulative total of 25 percent of the potential spawning area. If starry stonewort is treated under this exemption, then treatment of filamentous algae, planktonic algae, and native macroalgae is not allowed during May and June; and treatment of starry stonewort during May and June is restricted to one time only per starry stonewort treatment area. In the event of a harmful algae bloom (HAB) during May or June (documented by positive algal toxin test results, positive identification of HAB species, or other approved EGLE methodology), alternative treatment patterns may be considered by EGLE to protect public health.

Due to the toxicity of copper to spawning fish, do not apply copper products within 20 feet of a known, or suspected, active spawning bed.

Treatment of wild celery (*Vallisneria americana*) shall not occur more than two times per year within the same treatment area.

The use of water dye at the tracer rate is allowed by this permit. The tracer amount is defined in the Approved Chemical Table referenced in Section C.2. The use of water dye at the colorant application rate is prohibited under this permit. Water dyes that are labeled as herbicides (e.g., Aquashade®, Admiral®, Pond Care Algae Blocker®) are prohibited under this permit.

For all treatments, ensure that the retention time is adequate for the efficacy of the product. Impact to vegetation in unpermitted areas downstream of the treated waterbody caused by release of the pesticide is a violation of this permit, Part 31, and Part 33.

Do not treat within 500 feet of loons' nests between April 15 and August 15.

For treatment of all waterbodies in Ingham County, include the Ingham County Drain Commissioner's Office in the initial pre-treatment notification required to be sent to residents in the treatment area 7 to 45 days prior to the initial treatment of the calendar year. The notification shall be sent by email to Mr. Eric Daldos at [EDaldos@Ingham.org](mailto:EDaldos@Ingham.org). If potential treatment dates overlap with potential management activities by Ingham County, the Ingham County Drain Commissioner's Office staff may respond by requesting additional notification for specific times of year. A copy of the notification and additional correspondence shall be uploaded in MiWaters through the "ANC Notification of Ingham County Drain Commissioner" Schedule of Compliance for the associated permit by November 1 of the year of treatment. For general questions to the Ingham County Drain Commissioner's Office, contact the office at 517-676-8381 between 8:00 a.m. and 5:00 p.m., Monday through Friday.

Except for waterbodies with a total surface area of less than 10 acres, the chemical treatment of native emergent and floating leaf vegetation, such as water lilies, cattails, arrowhead, pickerelweed, rushes, etc., is approved for the purpose of providing access to the waterbody and not for the purpose of beach grooming. Restrict treatment of native emergent and floating leaf vegetation to a 40-foot by 40-foot area for swimming and boat launching, and a 20-foot wide boat lane to reach open water per residentially developed parcel. Treatment of an infestation of non-native floating or emergent species in excess of a 40-foot by 40-foot area per residential parcel is approved using selective application methods and timing of treatment to prevent impacts to non-target native species.

Except for waterbodies with a total surface area of less than 10 acres, chemical treatment of developed shorelines for the control of native algae (planktonic, filamentous, or macroalgae) or native submersed macrophytes is limited to 100 feet of frontage out to the 5-foot depth contour or 100 feet (whichever is closer to shore) per residential property.

Treatment of shoreline areas that are used as common areas (e.g., beaches and parks) and boat marinas are not limited by the 'residential' restrictions in this section. Vegetation may be treated inside the borders of these specific areas to maintain access and safe usage conditions, as delineated in the attached approved treatment map(s).

Chemical treatment of an infestation of non-native invasive species in areas exceeding 100 feet of frontage per residential property, in areas along undeveloped shoreline, and in offshore areas is approved using only the chemical protocol in the table below to prevent impacts to non-target native species in these areas. Treatment using more than one of the approved products in combination shall only be conducted in areas of an invasive monoculture to minimize potential impacts to native species. Low-dose chelated copper, at a rate not more than 0.11 ppm Cu, may be used with diquat, 2,4-D, triclopyr, flumioxazin, Aquathol K, and ProcellaCOR for treatments in these areas.

<b>Non-native Invasive Species Target</b>	<b>Chemical (maximum application rate)</b>	<b>Restrictions</b>
Eurasian watermilfoil ( <i>Myriophyllum spicatum</i> or hybrid watermilfoil)	Aquathol K (1 gal/ac) AquaStrike (1.625 gal/ac ft) Diquat dibromide (1 gal/ac) Carfentrazone (0.143 gal/ac ft, 100 ppb) Flumioxazin (1.05 lbs/ac ft, 200 ppb)	one time per calendar year, prior to June 15
	2,4-D (label maximum) Triclopyr (label maximum) 2,4-D - Triclopyr combination (label maximum) ProcellaCOR (15.85 oz/ac ft)	None
Curly leaf pondweed ( <i>Potamogeton crispus</i> )	Aquathol K (1 gal/ac) AquaStrike (1.625 gal/ac ft) Diquat dibromide (1 gal/ac) Flumioxazin (1.05 lbs/acft, 200 ppb)	one time per calendar year, prior to June 15
Starry stonewort ( <i>Nitellopsis obtusa</i> )	Chelated copper algaecides (1.2 gal/ac ft) Copper sulfate (4.4 lb/ac ft) Cutrine Plus granular (60 lb/ac) flumioxazin (1.05 lbs/ac ft, 200 ppb) Harpoon Granular (80 lb/ac ft of plant height) Hydrothol 191 liquid (2.2 pints/ac ft) Hydrothol Granular (9.72 lbs/ac ft) Komeen Crystal (15.5 lbs/ac ft, 1 ppm) SeClear (6.4 gal/ac ft) SeClear G (18 lbs/ac ft)	None
Fanwort ( <i>Cabomba caroliniana</i> )	Flumioxazin (1.05 lbs/ac ft, 200 ppb)	None
All other non-native invasive species not identified above	Chemicals approved include those listed on the table titled "Chemicals Approved for use Under the Aquatic Nuisance Control Standard Permits."	None

Application of herbicides containing imazapyr or carfentrazone can be made only by federal or state agencies, such as Water Management District personnel, municipal officials, and the U.S. Army Corps of Engineers, or those applicators who are licensed or certified aquatic pest control applicators and are authorized by the state or local government.

Application of any herbicide on a per-acre basis in shallow areas may result in a concentration of active ingredient exceeding the federal label maximum, which could result in unacceptable impacts to non-target organisms. The per-acre chemical amount must be adjusted to the depth of water being treated. Consult the federal product label to ensure proper application.

Do not apply granular endothal or granular 2,4-D products within 75 feet of any active drinking water well or within 250 feet of wells less than 30 feet deep. Distances are measured from the well location not from the shoreline. Wells and isolation distances are not necessarily shown on the treatment map. Prior to treatment, locate the water wells and observe the appropriate isolation requirements. If well location and/or depth are unknown, then assume the full 250-foot isolation distance.

Multiple products with the same active ingredient are approved by this permit. Do not apply multiple formulations of the same active ingredient that, in combination, exceed (1) either of the product label application rates and/or active ingredient concentration for the target species and site conditions, or (2) the approved application rate on this permit, if it is lower than the maximum label rate.

The use of Hydrothol 191 liquid and/or granular herbicide has been approved at a rate in excess of 0.3 parts per million (ppm) and, according to the federal product label, may be toxic to fish under certain conditions. The federal product label suggests that treatment be conducted only by a certified pesticide applicator. Apply product evenly in narrow margins or strips to control target vegetation so fish are not killed. Apply product from the shoreline out so fish are not trapped. Do not treat more than 10 percent of the waterbody, or a bay, at a time with doses greater than 1.0 ppm (54 pounds per acre foot granular or 1.4 gallons per acre foot liquid).

If the entire waterbody(ies) approved for treatment under this permit has been treated with fluridone within the previous two years, then the following requirement is in effect:

Aquatic vegetation survey requirements as specified by the previous fluridone permit are incorporated by reference. Surveys must be submitted to EGLE through the MiWaters permitting database not later than November 1 of the year the survey was performed.

Upon receipt of written notification from EGLE, the permittee may be required to fulfill any of the following requirements:

- Conduct the chemical treatment only when an EGLE representative is present
- Notify EGLE not less than two business days in advance of chemical treatment(s)

- Submit an accurate map of the exact locations where each chemical was applied to EGLE within 24 hours of the completion of each treatment
- In addition to the normally required notification, also notify other person(s) specified by EGLE
- Notify the Michigan Loon Watch Coordinator by e-mail ([MichiganLoons@yahoo.com](mailto:MichiganLoons@yahoo.com)) a minimum of two business days prior to the initial application of chemicals to this waterbody. Notification must include the name and county of the waterbody, the anticipated treatment schedule for the calendar year, and a telephone number where the permittee can be contacted. A copy of the notification shall be uploaded in MiWaters through the “ANC Notification of Loon Watch Coordinator” Schedule of Compliance for the associated permit by November 1 of the year of treatment.
- Allow EGLE or its representative to collect a sample of the chemical(s) used before or during any chemical treatment
- Apply chemicals so that swimming restrictions and fish consumption restrictions are not imposed on any Saturday, Sunday, or state-declared holiday
- Take special precautions to avoid or minimize potential impacts to human health and safety, the environment, and non-target organisms
- Perform lake water residue analysis to verify the chemical concentrations in the waterbody according to a frequency, timing, and methodology approved by EGLE
- Perform aquatic vegetation surveys according to a frequency, timing, and methodology approved by EGLE
- Use chemical control methods for nuisance aquatic vegetation that are consistent with the approved vegetation management plan submitted separately or as part of a lake management plan
- Perform pretreatment monitoring of the target aquatic nuisance population according to a frequency, timing, and methodology that have been approved by EGLE
- Submit a copy of any vegetation management plan, lake management plan, lake report, written recommendations, and/or vegetation surveys that are prepared for the waterbody
- Any other requirements determined by EGLE as necessary to protect the natural resources or the public health and safety, to prevent economic loss or impairment of recreational uses, to protect non-target organisms, or to help ensure control of the aquatic nuisance

## **5. Notification and Posting Requirements**

### **Expansion Notification**

Section 3311 (3) of Part 33 allows a permittee to expand the area of impact, without a formal permit revision, beyond that authorized in this permit to include adjacent (as defined in Section F. Definitions) areas of the same waterbody or treatment area that became infested after the application was submitted. The areas allowed for expansion, without a formal revision, include only infestations of non-native species, as defined in Section F. Definitions. The expansion treatment must use the same chemicals and application rates as those currently authorized in the permit.

The permittee shall submit: (1) a notification of an impending expansion treatment, and (2) an expansion report.

1. Notification of impending expansion treatment - If expanding the area of impact for treatment of an infestation, the permittee shall notify EGLE prior to the initial treatment of the impending expansion area. This notification may be submitted by telephone at 517-284-5593 or by e-mail at [EGLE-WRD-ANC@Michigan.gov](mailto:EGLE-WRD-ANC@Michigan.gov), except in the following two situations:
  - a) The original area of impact authorized by this permit is greater than 100 acres and the proposed expansion exceeds 50 percent of the original authorized area.
  - b) The treatment area expansion is proposed in a waterbody or treatment area that is located within or along the shoreline of the Great Lakes or inland waters in a municipality or township on the list titled Appendix A – List of Municipal Waterbodies with Intakes. The list can be found at: [Michigan.gov/ANC](http://Michigan.gov/ANC) under the topic “Application & Permit Information”, select “Appendix A – List of Municipalities for the Purpose of Notification”.

In these two situations, the permittee shall complete the “ANC Pre-Expansion Notification” Schedule of Compliance in the MiWaters permitting database not less than two full business days before the planned treatment of the expanded area. This notification shall include a map of the proposed expansion area(s), a list of chemical(s) to be applied, the date and time of anticipated treatment, written authorization to treat, and contact information for the on-site chemical applicator. EGLE has two business days to notify the permittee of any specific concerns about the proposal.

2. Expansion Report Form - The permittee shall complete the “ANC Treatment Expansion Report” Schedule of Compliance in the MiWaters permitting database not later than 15 days following the initial expansion treatment.

### **Treatment Notification**

The permittee is required to notify, in writing, an owner of any waterfront property on the permitted waterbody within 100 feet of the area of impact, not less than seven days and not more than 45 days, before each initial chemical treatment of the calendar year, in accordance with Section 3310(h) of Part 33. If the owner is not the occupant of the waterfront property or the dwelling located on the property, then the owner is responsible for notifying the occupant. This notification requirement applies to each new, or expanded, area of impact added during the calendar year. Notification records shall include at a minimum: a complete list of who received notification, the method used for notification distribution, the date notification was sent or delivered, and a record of barriers to notification.

### **Posting Requirements**

Notice of the chemical application must be posted prior to each chemical application, in accordance with Section 3310(d) of Part 33, and shall remain posted for a minimum of 24 hours or until all water use restrictions have expired, whichever is later. Alternate

posting locations may be approved on a case-by-case basis by EGLE upon written request from the permittee. The written request must explain the necessity for alternative posting locations and a description of the proposed posting locations, including a map for clarification. An alternate posting request shall be submitted through the MiWaters permitting database as an attachment to the permit application or revision request.

The brand name and water use restrictions listed on the label for the specific product used shall be included on the posting sign. In addition, a 24-hour water use restriction for swimming or entry shall be indicated for all chemical applications, except for copper-based algae treatments and dyes when approved for use as a tracer or marker. A posting sign template is available at [Michigan.gov/ANC](http://Michigan.gov/ANC) under the topic "Application & Permit Information", select "Posting Sign."

### **Section C. Permit Revisions**

The permittee may request a revision of this permit if the proposed revision(s) does not involve a change in the scope of the project, as defined under Revision Criteria in Section F. Definitions, and the permittee requests the revision(s) in writing, using the ANC Permit Revision Request Form in the MiWaters permitting database. A revision that involves a change in scope of the original project requires submittal of a new permit application. A revision for a EGLE error may be requested through an e-mail to the permit writer or to [EGLE-WRD-ANC@Michigan.gov](mailto:EGLE-WRD-ANC@Michigan.gov).

### **Section D. Reporting and Recordkeeping**

#### **1. Release of Product and Adverse Incident Reporting and Documentation**

If product release outside of the approved treatment area(s) or downstream of a treated waterbody is suspected or confirmed, and/or if any fish or wildlife damage or significant non-target plant impacts occur in association with any chemical application, the permittee is required to immediately contact the Department's 24-hour Pollution Emergency Alerting System (PEAS) telephone number, 1-800-292-4706.

If any fish or wildlife damage or significant non-target plant impacts occur in association with any chemical application, the permittee is also required to notify the EGLE's ANC program at [EGLE-WRD-ANC@Michigan.gov](mailto:EGLE-WRD-ANC@Michigan.gov) during regular business hours. Upon receiving the notification, the "ANC Notification of Human or Resource Impacts" Schedule of Compliance (SOC) will be added to the corresponding permit in the MiWaters Permitting Database and the permittee shall complete the SOC.

#### **2. Treatment Report**

A complete treatment report including date(s) of application, chemical name(s), United States Environmental Protection Agency (EPA) registration number(s), actual application rate(s), actual treatment area, average water depth in treatment area, amount(s) of chemical(s) applied, target plant species, weather conditions at time of application, and treatment map(s) indicating the area(s) of impact shall be submitted via the "ANC Treatment Report" Schedule of Compliance in the MiWaters permitting

database not later than November 30 of each year that this permit is in effect, even if treatment is not undertaken.

### **3. Record Retention**

The permittee shall keep written or electronic records as required in this permit. These records must be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. All records shall be made available within two calendar days to EGLE upon request, or within a time frame agreed upon by EGLE and the permittee.

The permittee shall obtain and maintain written permission from each bottomland owner, as described in Section E.6, in the area of impact for a minimum of one year from the expiration date of this permit, unless exempt under Section 3308 of Part 33.

All other records shall be retained for a minimum of one year beyond the expiration date of this permit.

## **Section E. Liability**

### **1. Noncompliance**

Receipt of a permit in MiWaters confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit. Noncompliance with these terms and conditions, shall be cause for the modification, suspension, or revocation of this permit. If the permittee does not accept the terms and conditions of this permit the permittee shall submit a request for a termination of this permit in the MiWaters permitting database. Further, EGLE may initiate criminal and/or civil proceedings to correct deficiencies, protect public health and natural resources, and secure compliance with statutes.

Federal pesticide label requirements are incorporated into this permit by reference. Violation of federal pesticide label requirements is considered a violation of this permit.

The issuance of this permit does not authorize violation of any federal, state, or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other EGLE permits, or approvals from other units of government, as may be required by law.

Nothing in this permit shall be construed to preclude the initiation of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under the Endangered Species Act of 1973 (Title 16 of the United States Code, Section 1531 et seq.), or Part 365, Endangered Species Protection, of the NREPA.

### **2. Property Rights**

This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or violation of public or private rights.

### **3. Indemnification**

The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representatives of the permittee, undertaken in connection with this permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.

### **4. Right of Entry**

The permittee shall allow EGLE the following actions upon the presentation of credentials:

- To enter upon the permittee's premises where application equipment is located or in which any records are required to be kept under the terms and conditions of this permit
- To copy any records required to be kept under the terms and conditions of this permit
- To inspect equipment for use under this permit
- To sample chemicals and discharges

### **5. Laboratory and Analytical**

When required by this permit or per the pesticide product label, laboratory analytical methods, practices, and product or water sampling techniques shall be performed in accordance with standard laboratory guidelines. The permittee shall periodically calibrate and maintain all monitoring instrumentation at necessary intervals to ensure accuracy of measurements. When outside contractors or volunteers perform sampling and analysis, the permittee shall ensure that said contractors or volunteers are sufficiently qualified to perform the required sampling and analysis, and that the quality control measures listed above are properly executed. All records shall be made available within two calendar days to EGLE upon request, or within a time frame agreed upon by EGLE and the permittee.

### **6. Permission to Treat**

The permittee shall obtain authorization to chemically treat the proposed area of impact by obtaining written permission from each property owner who owns bottomlands in the area of impact. Written authorization from all property owners within the area of impact is required for each calendar year that this permit is in effect, prior to chemical treatment. It is the responsibility of the permittee to ensure that all permissions within the permitted treatment area are up to date each calendar year, per Section 3308 of Part 33.

## **Section F. Definitions**

**Adjacent:** An area of impact, contiguous to an approved treatment area, permissible for expansions for an infestation per Section 3311(3) of Part 33.

**Change of Scope:** A request that does not meet the revision criteria for a permit revision.

**Emergent Plants:** A plant that is rooted in the sediment with most parts of the plant maintained above the waterline.

**Floating-Leaf Plants:** Plants with leaves and flowers that float on the water surface.

**Infestation:** Any non-native invasive species that have grown into dense, monotypic stands causing ecological or economic harm.

**Initial Chemical Treatment:** The first treatment of each calendar year at approved treatment areas, as well as at expanded treatment areas, for infestations.

**Native:** An indigenous species to the ecosystem of Michigan prior to European settlement necessary for environmental health, habitat production, and economic development of fisheries and wildlife recreation.

**Non-native Invasive:** An introduced species that did not occur in Michigan's ecosystem prior to European settlement and where introduction causes or is likely to cause habitat, environmental, or economic harm, or harm to human health.

**Offshore:** Areas beyond the 5-foot depth contour or 100 feet from shore, whichever is closer to shore.

**Revision Criteria:** One or more of the following: (1) addition of chemical(s) or modification of chemical amount(s) for an existing approved treatment area(s); (2) addition, deletion, or modification of permit conditions to protect natural resources or improve treatment efficacy or operations; (3) addition of treatment area(s) that are consistent with Section B.4. of this permit to a site absent of environmental, public health, and endangered and/or threatened species of concern; and/or (4) a correction of an EGLE error.

**Shoreline:** The line marking the edge of a body of water.

**Submersed Plants:** Plants typically rooted in the sediment, growing almost entirely under water.

# EGLE Approved Treatment Map for 2022 – 2025

## Map 1 of 1

Bear Lake  
Muskegon County  
Laketon Township  
T10 R17W Sec 12-14 23,24  
455 Surface Acres

Littoral Zone = 348 acres  
Algae Area (May & June) 25% = 87 acres

 Weed & Algae Treatment Area = 62 acres

 Exotic Treatment Area = 286 acres

